

IN THE CLAIMS

1. (Original) A method of processing position information in a mobile device, comprising:
 - receiving a request for a position to be computed within a predefined period of time;
 - calculating a plurality of positions within said predefined period of time;
 - caching at least one of said plurality of positions in a position cache;
 - deriving accuracy data with respect to at least one of said plurality of positions; and
 - identifying a best position stored in said position cache in response to said accuracy data.
2. (Original) The method of claim 1, wherein said best position is identified before expiration of said predefined period of time.
3. (Original) The method of claim 1, wherein said best position is a last calculated position of said plurality of positions with respect to expiration of said predefined period of time.
4. (Original) The method of claim 1, further comprising:
 - storing at least a portion of said accuracy data in said position cache.
5. (Original) The method of claim 1, wherein said deriving step comprises:
 - computing an indicia of accuracy for each position stored in said position cache; and
 - storing each said computed indicia of accuracy in said position cache.
6. (Original) The method of claim 5, wherein each said indicia of accuracy is derived from at least one of a covariance matrix of a Kalman filter, pseudorange residual data, and dilution of precision data.
7. (Original) The method of claim 5, further comprising:

sending said best position and a stored indicia of accuracy associated with said best position to a server in communication with said mobile device.

8. (Original) The method of claim 5, further comprising:

comparing a stored indicia of accuracy associated with said best position to a threshold;

sending said best position to a server in communication with said mobile device in response to said stored indicia of accuracy associated with said best position satisfying said threshold; and

sending an indication of no accurate position to said server in response to said stored indicia of accuracy associated with said best position failing said threshold.

9. (Original) The method of claim 1, further comprising:

sending said best position to a server in communication with said mobile device.

10. (Original) The method of claim 1, wherein said request is received from a server in communication with said mobile device.

11. (Original) The method of claim 1, wherein said request is generated by said mobile device.

12. (Original) A method of processing position information in a mobile device, comprising:

receiving a request for a position to be computed within a predefined period of time;

computing a best position and a corresponding indicia of accuracy within said predefined period of time;

comparing said indicia of accuracy to a threshold; and

retaining said best position in a cache in response to said indicia of accuracy satisfying said threshold.

13. (Original) The method of claim 12, further comprising:

sending said best position to a server in communication with said mobile device.

14. (Original) The method of claim 12, further comprising:

identifying a previously retained position in said cache having a best accuracy in response to said indicia of accuracy failing said threshold;

sending said previously retained position to a server in communication with said mobile device.

15. (Original) The method of claim 12, further comprising:

searching said cache for a previously retained position having a best accuracy in response to said indicia of accuracy failing said threshold;

sending an indication of no accurate position to said server in response to no previously retained position being stored in said cache.

16. (Original) The method of claim 12, further comprising:

identifying a previously retained position in said cache having a best accuracy in response to said indicia of accuracy failing said threshold;

comparing said best accuracy of said previously retained position to a second threshold;

sending said previously retained position to a server in communication with said mobile device in response to said best accuracy satisfying said second threshold.

17. (Original) The method of claim 16, further comprising:

searching said cache for another previously retained position having a second best accuracy in response to said best accuracy failing said threshold.

18. (Original) The method of claim 12, wherein said computing step comprises:

calculating a plurality of positions within said predefined period of time;

caching at least one of said plurality of positions;

deriving an indicia of accuracy with respect to at least one of said plurality of positions; and

identifying said best position and said corresponding indicia of accuracy.

19. (Original) The method of claim 18, wherein said best position is identified before expiration of said predefined period of time.

20. (Original) The method of claim 18, wherein said best position is a last calculated position of said plurality of positions with respect to expiration of said predefined period of time.

21. (Original) The method of claim 12, wherein said request is received from a server in communication with said mobile device.

22. (Original) The method of claim 12, wherein said request is generated by said mobile device.

23. (Original) A mobile device, comprising:

- an A-GPS receiver for processing satellite signals;

- a processor for calculating, from the processed satellite signals, a plurality of positions within a predetermined time, and for calculating accuracy data associated with said plurality of positions; and

- a position cache, coupled to the processor, for storing at least one of said plurality of positions.

24. (Original) The mobile device of claim 23, wherein the position cache is configured to store said accuracy data.

25. (Original) The mobile device of claim 23, wherein the processor derives said accuracy data from at least one of a Kalman filter, dilution of precision data, and pseudorange residual data.

26. (Original) The mobile device of claim 23, further comprising:

- a transceiver for receiving a request for a position to be computed within said predetermined time from a server.